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Client Ref. Nos.: 2003P04918US01

REMARKS

Claims 1, 3, 5-7, and 10-22 are pending in this application, of which claims 1, 10, and 16 are independent. Favorable reconsideration of the Non-Final Action mailed December 23, 2008 ("Action") is respectfully requested in view of the foregoing amendments and the following remarks.

Claim Objections

Claims 10-16, and 20-22 were objected to due to the following informalities:

> With regard to claim 10, Examiner suggests replacing "for transmitting information" in line 17 with "to transmit information" in consistent with claim language.
> With regard to claim 10, Examiner suggests replacing "said information" in line 22 with "said information from the client-side application" for clarity.
> With regard to claim 10, Examiner suggests replacing "and for signaling ..." with ";and [starting a new paragraph] signaling ..." in consistent with claim language.
> With regard to claim 10, Examiner suggests spelling out CPE when used for the first time.
> With regard to claim 16, Examiner suggests removing the extra word "an" in line14.
> With regard to claim 16,Examiner suggests replacing "for sending" in lines 11-12, "initiate" in line 13, "terminate" in line 14, and "logoff" in line 15, with "to send", "to initiate", "to terminate", and "to logoff" for consistency.

Claims 10 and 16 have been amended as suggested by the Examiner. Withdrawal of the claim objections is requested.

35 U.S.C. § 112 Rejections

Claim 16 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to point out and distinctly claim the subject matter which the Applicant regards as the invention.

> With regard to claim 16, it is unclear what is the limitation of the "means in said proxy signaling server" in line 16 because it is unclear whether the limitation "wherein said initiating said bandwidth-on-demand session ..." in lines 16-19 is the same bandwidth-on-demand session in line 14 of said subscriber data processing system and if so, that limitation

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should be within "means in said subscriber data processing system" in lines 11-15.

The Applicant submits that the amendments to claim 16 render the §112 rejections moot.

Claims 10 and 16 have been further amended to maintain proper antecedent basis.

Claim 16 was rejected as omitting essential elements. In particular, the Examiner stated that "The omitted structural cooperative relationships are: 1) between the subscriber in line 2 and CPE in line 3, and 2) between the remote content-provider data processing system in line 3 and the rest of the system." We submit that the relationships between elements in amended claim 16 are sufficiently clear and respectfully request that the rejection of claim 16 under 35 U.S.C. § 112 be withdrawn.

35 U.S.C. § 102 Rejections

Claims 10-16, and 20-22 were rejected under 35 U.S.C. § 102(e) as being anticipated by Chen et al. (US 7,382,785).

Claim 10 is directed to a broadband communication system that includes "a client-side application on said subscriber data processing system for use by said subscriber: to login to said proxy signaling server."

Support for this feature can be found, in one example, in paragraph [0025] of the present application, which states:

> Before initiating a BoD session, the subscriber begins by logging in to the proxy server 140. The client-premises application 107 sends a LoginReq message on behalf of the subscriber to the proxy server 140 (step 202). The LoginReq message may include information such as a customer ID, customer name, device ID, login name, and/or password. If login is possible, the proxy server 140 responds to the LoginReq message with a LoginReqAck message (step 204) containing information such as the name of available broadband services (step 206).

In rejecting claim 10, the Examiner stated on pages 5 and 6 of the Action:

> a client-side application (subscriber SVC-enabled application 100, col. 9, line 26) on said subscriber data processing system (source subscriber 10) for use by said subscriber (source subscriber 10): to login

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(password/logs in) to said proxy signaling server (proxy signaling agent 35) ("The RADIUS server is provisioned with the user authentication information (username and password) ....", col. 5, line 22) (See Also "When a user logs in ... ", col. 8, lines 30-31),

The Examiner appears to take the position that the cited portions of US 7,382,785 disclose the recited "client-side application on said subscriber data processing system for use by said subscriber: to login to said proxy signaling server." The Applicant respectfully submits that Chen provides no such disclosure. Rather, in Chen, a subscriber interacting with the Chen system uses a client-side application to interact with a connection server, not a proxy signaling server. As an example, the Applicant directs the Examiner's attention to col. 4, line 30 – col. 5, line 23, which states in relevant part:

> According to an aspect of the present invention, the subscriber 10 can dynamically select a peer device, such as the destination subscriber device 40, to communicate with and can request QoS connections to the peer device by communicating over the control connection. In one embodiment, the QoS connection to the peer device 40 is a dynamically established SVC 50....
> **In order to dynamically establish the SVC 50, the subscriber 10 transmits a connection setup request to the connection server 25. ... The client communicates to the connection server 25 via an API to a software component,** the network service agent, which is located on the client (bridge model) or ATU-R (routed model). **The request, originating from the subscriber 10 is transmitted to the connection server 25 over the subscriber's best effort connection to the ISP 24.** The request includes information about the SVC 50 (or SVCs, each being associated with a different application) to be setup, including the destination subscriber 40, a shared session key agreed upon by subscriber 10 and subscriber 40, a class of service of the SVC 50, and a traffic descriptor of the SVC 50....
> The connection server 25 then queries an LDAP 30 for information about the subscriber 10 and the subscriber 40. The LDAP 30 receives such subscriber information, and information about the network as part of the provisioning process flow....
> Authorization and authentication information can also be retrieved from a RADIUS server 28, if necessary. In addition, accounting records can be stored on the RADIUS server 28. The RADIUS server 28 is provisioned with the user authentication information (username and password) as part of the customer management flow.

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The bolded text in the above-quoted portions of Chen makes clear that the subscriber uses a client-side application to communicate with the connection server. The italicized text, when read in the context of the underlined text, makes clear that the connection server of the Chen system (not the proxy signaling server as suggested by the Examiner) retrieves information from the RADIUS server and uses such information to authorize and authenticate the subscriber. Once authenticated, the connection server carries out a call admission control step and consequently contacts the proxy signaling server:

> After the necessary information, such as the AESAs, VPI/VCIs, class of service, and bandwidth, etc., is obtained from the LDAP 30 and the RADIUS server 28, the connection server 25 performs a call admission control (CAC) step to determine if sufficient available bandwidth exists in the ATU-Rs and DSLAMs to accommodate the connection request. The connection server 25 maintains state information of the currently available bandwidth at each subscriber's ATU-R and related DSLAM up-links. If sufficient bandwidth is available, then the connection server 25 sends the SVC request and the necessary information to a proxy signaling agent 35. The proxy signaling agent 35 is responsible for performing the SVC signaling and relaying results and status information from the network elements to the connection server 25. That is, the proxy signaling server 35 communicates with the SVC capable ATM network 16 to establish, to tear down, and to obtain the status of SVC connections, and to obtain information about resource availability. (col. 5, lines 33-51).

The Applicant respectfully submits that no portion of Chen discloses or makes obvious a broadband communication system that includes "a client-side application on said subscriber data processing system for use by said subscriber: to login to said proxy signaling server," as recited in claim 10. Rather, the embodiments of the Chen system described in Chen require the connection server to serve as an interface between the client-side application and the proxy signaling server. The Chen system does not provide a direct connection between the client-side application and the proxy signaling server, much less allow for the client-side application to log in to the proxy signaling server.

The recited "client-side application" of amended claim 10 is further operable "to receive service advertising information from said proxy signaling server due to said

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login." Support for this feature can be found, in one example, in paragraph [0025] of the present application, which states

> If login is possible, the proxy server 140 responds to the LoginReq
> message with a LoginReqAck message (step 204) containing information
> such as the name of available broadband services (step 206). Such
> information may also be sent to the subscriber in a separate Service
> Advertising message. After the subscriber receives the list of available
> serves, the data processing system 105 sends a Service AdvertisingCfm
> message to the proxy server 140 to acknowledge receipt of the Service
> Advertise message (step 208). After the list of services has been displayed
> to the subscriber, a NetServicesCfm message is sent to the proxy server as
> confirmation (step 210), which completes the Subscriber Login/Service
> Advertising phase.

The portions of Chen cited by the Examiner in support of her position do not disclose "a client-side application ... to receive service advertising information due to said login." Rather, the cited portions of Chen describe an aspect of the connection server (not the client-side application) that is operable to receive information from the LDAP and the RADIUS server. Further, even if the "results and status information" of Chen is read as corresponding to the recited "service advertising information" as asserted by the Examiner, col. 5, lines 44-47 make clear that such information is sent by Chen's proxy signaling server to Chen's connection server. Chen does not disclose or make obvious a system that includes "a client-side application on said subscriber data processing system for use by said subscriber: to login to said proxy signaling server, [and] to receive service advertising information from said proxy signaling server due to said login," as recited in amended claim 10.

Claim 10 is further directed to a broadband communication system that includes "a connection-management application on said proxy signaling server for: providing service advertising information to said client-side application due to said login."

As previously discussed, even if the "results and status information" of Chen is read as corresponding to the recited "service advertising information" as asserted by the Examiner, col. 5, lines 44-47 make clear that such information is sent by Chen's proxy

signaling server to Chen's connection server, not to a client-side application as required in claim 10.

For at least the foregoing reasons, the Applicant submits that claim 10 is allowable over Chen.

Independent claim 16 includes similar limitations and is allowable over Chen for at least the same reasons set forth above with respect to claim 10.

The dependent claims are also believed to define patentable features of the invention. Each dependent claim partakes of the novelty of its corresponding independent claims and, as such, each has not been discussed specifically herein.

35 U.S.C. § 103 Rejections

Claim 1 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Sreedharan et al. (US 2002/0057700) in view of Soirinsuo et al. (US 6,032,272). Claims 2-7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sreedharan in view of Soirinsuo, and further in view of Cunetto et al. (US 7,307,993).

Claim 1 has been amended to include features recited in previously-presented claims 2 and 4 (now canceled). As amended, claim 1 is directed to a method of providing bandwidth on demand in a broadband communication system that requires in part "sending a message from said subscriber processing system to a proxy signaling server comprising information related to said bandwidth-on-demand session ..., wherein said message from said subscriber processing system to said proxy signaling server does not comprise User Network Interface (UNI) signals...." Support for this amendment can be found, in one example, in paragraph [0004] of the present application.

The Applicant submits that even if teachings of Sreedharan, Soirinsuo, and Cunetto are combined, the resulting system still does not disclose all of the features of amended claim 1. As an example, none of the references disclose or make obvious "sending a message from said subscriber processing system to a proxy signaling server comprising information related to said bandwidth-on-demand session ..., wherein said message from said subscriber processing system to said proxy signaling server does not comprise User Network Interface (UNI) signals...." In fact, Cunetto specifically

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discloses end systems that signal the ATM switch by means of UNI signaling. (see, e.g., col. 5, lines 55-64).

For at least the foregoing reasons, the Applicant submits that claim 1 is allowable over Sreedharan in view of Soirinsuo, and further in view of Cunetto. The dependent claims are also believed to define patentable features of the invention. Each dependent claim partakes of the novelty of its corresponding independent claims and, as such, each has not been discussed specifically herein.

Conclusion

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

The Petition for Extension of Time fee in the amount of $130.00 is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to Deposit Account No. 50-4189, referencing Attorney Docket No. 3A001-002001.

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Respectfully submitted,

Date: _____4 | 22 | 0 9_____

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